Double-Crested Cormorants

IN ALABAMA

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Double-crested cormorants (*Phalacrocorax auritus*) have become a familiar sight in the skies and on the waters of Alabama. These large black birds resemble a small goose, usually weigh around 3 pounds, and have a sharp, hooked bill. During the middle of the 20th century, cormorant sightings were rare. The Interior population of double-crested cormorants, which is the source of Alabama's birds, suffered population declines throughout their primary breeding habitats in the Great Lakes region because of persecution and the effects of pesticides. Since that time, cormorant populations have shown remarkable increases as a result of extensive conservation efforts and pesticide bans, especially the elimination of DDT. In fact, cormorants are extremely common in areas where they were rare just decades ago, and new breeding colonies are being discovered in areas where they were never known to nest.

Cormorants are a migratory species with their core nesting area in the midwestern United States and Central Canada. Most of the cormorants seen in Alabama are wintering or migrating through the state from October through April. Estimates of cormorant abundance from the National Audubon Society's Annual Christmas Bird Counts demonstrate that cormorant abundance has increased steadily since 1970, and cormorant winter abundance indices are at their highest during the past 2 years. We now have major cormorant winter roosts on most of our major reservoirs. As with other areas, double-crested cormorants also have expanded their breeding range in Alabama and are known to nest in at least 3 locations, with a breeding population of at least 700 birds.

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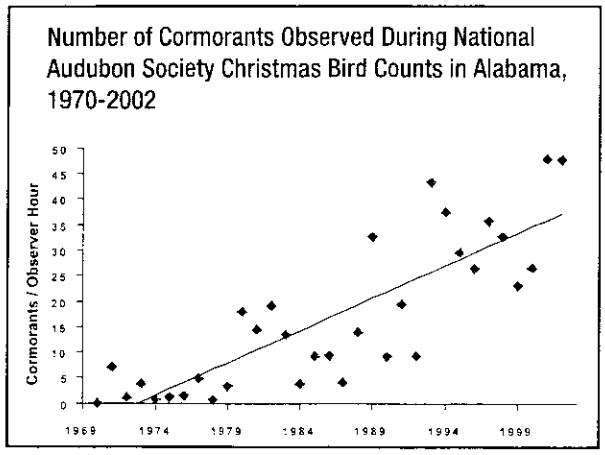
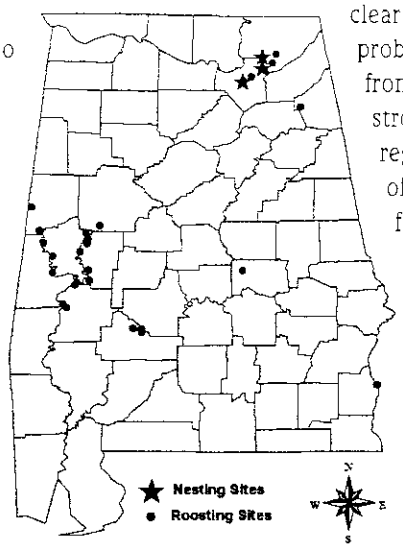
Unfortunately, their recent abundance, their nesting habits, and their foraging habits have thrust this species into conflict with fishermen, fish farmers, and sometimes even natural resource managers. Like many Alabamians, cormorants are excellent anglers. These diving birds can eat about ¾ - 1 pound of small fish per day. Where their diets have been studied, they seem to eat whatever kind of fish is available. This habit can cause serious conflicts when the birds are foraging on commercial fish farms. Cormorant impacts to aquaculture in the southeastern United States are well-documented. The cost of replacing farm-raised catfish eaten annually by cormorants in Mississippi is estimated at nearly $5 million.

Other conflicts have arisen because of the nesting habits of the cormorants. These birds are a colony-nesting species, which means they nest together in groups as large as 10,000 birds in a single location. Whether the colony is in



trees or on the ground, the effects of so many birds building nests and depositing tons of feces can be catastrophic to sensitive vegetation and other birds using the same habitats. We are presently experiencing this type loss of natural resources on Lake Guntersville. While we have not seen nesting colonies as large as those in the Great Lakes, nests have been increasing each year and may now be at a critical level where exponential growth could occur.



These nesting sites in particular have had devastating impacts on several islands within Guntersville Lake already. In addition to the loss of habitat when trees and vegetation are killed from large amounts of fecal matter, the island is more susceptible to erosion. Some of the islands impacted by cormorant rookeries and roosts have begun to lose shoreline to erosion and dead trees have fallen into the water creating navigational hazards. Fishermen have begun to question the potential impacts to the famous bass fishery on the Lake, although there is no clear evidence that this is a problem right now. Odors from the rookery can be a strong mixture of feces and regurgitated fish which often stimulates complaints from lake visitors as well, which all adds up to a serious and growing issue for resource managers.

Managing conflicts that involve double-crested cormorants can involve many agencies, interests, and options. Wildlife damage to aquaculture and natural resources in the United States falls within the responsibility of the U.S. Department of Agriculture's Wildlife Services program, but the management authority of migratory birds is the responsibility of the U.S. Fish and Wildlife Service and Alabama Division of Wildlife and Freshwater Fisheries, where management authority for fisheries resources also resides. Effective cormorant management to reduce damage on aquaculture facilities usually consists of an integrated program of both lethal and non-lethal techniques. Pyrotechnics and propane cannons are often combined with shooting to disperse birds from fish farms. In 1998, the U.S. Fish and Wildlife Service issued a standing depredation order for controlling cormorants on aquaculture facilities in 13 southern states, including Alabama. This order eliminated the need for growers to obtain individual permits to shoot this species on their farms during winter months. Non-lethal harassment has been used as well, and is effective for dispersing cormorants from night roosts near aquaculture facilities. By moving cormorants from these roosts, the number using fish farms as a food source in the following days is reduced.

A second rule change that became effective in 2003 granted authority to the USDA Wildlife Services Program to shoot cormorants without a permit at these night roosts in an attempt to curb their negative impact on these aquaculture facilities. This change may further help reduce the number of double-crested cormorants nesting near catfish farms and re-enforce non-lethal harassment efforts. In 2003, the U. S. Fish and Wildlife Service also issued a depredation order to allow management of conflicts with this species to protect natural resources. This depredation order allows egg oiling, nest/egg destruction, and lethal take of adult cormorants by Federal, state, and tribal entities to protect local sport fisheries, vegetation or trees, and other wildlife species that are impacted by cormorant populations.

Double-crested cormorants are a wildlife management success story. In half a century, this adaptable species was recovered from perilously low population levels to the point of overabundance. Biologists, farmers, and sportsmen are beginning to understand the ecological role of cormorants in the aquatic ecosystems of the state. They are also learning the economic consequences to Alabama's vital agricultural and natural resources that result from the growing presence of these birds. In the coming years, wildlife managers will have to apply the same management skills that successfully recovered this and other species to find solutions to the conflicts that arise with increasing populations of double-crested cormorants.

Cormorant nests can be found both on the ground and in trees; however, most nests are found in trees on Guntersville Lake.